

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) An immunomodulator which comprises an antigen-presenting-cell (APC) targeting molecule coupled to an immunomodulatory antigen, wherein said APC targeting molecule mimics the superantigen SMEZ-2 but does not include a fully functional T-cell receptor binding site.

2. (Original) An immunomodulator which comprises an antigen-presenting-cell (APC) targeting molecule coupled to an immunomodulatory antigen, wherein said APC targeting molecule is a molecule which is structurally a SMEZ-2 superantigen but for a disrupted T-cell receptor binding site such that the molecule has little or no ability to activate T-cells.

3. (Original) An immunomodulator which comprises SMEZ-2 having one or more mutations at positions 18, 42, 75 and 182 of the amino acid sequence of ~~SEQ ID:1~~ SEQ ID NO:1 coupled to an immunomodulatory antigen.

4. (Original) An immunomodulator as claimed in claim 3 wherein SMEZ-2 has one or more mutations chosen from the group consisting of:

Y18A;
W75L;
K182Q; and
D42C.

5. (Original) An immunomodulator which comprises SMEZ-2 having the mutations of Y18A, W75L, K182Q, and D42C, coupled to an immunomodulatory antigen.

6. (Original) An immunomodulator which comprises SMEZ-2 having the mutations of W75L, K182Q, and D42C, coupled to an immunomodulatory antigen.

7. (Original) An immunomodulator which comprises the defective TcR binding SMEZ-2 coupled to ovalbumin.

8. (Original) An immunomodulator which comprises the defective TcR binding SMEZ-2 coupled to tetanus toxoid (TT) or a peptide thereof.

9. (Original) An immunomodulator which comprises the defective TcR binding SMEZ-2 coupled to LCMV peptide.

10. (Currently amended) An immunomodulator as claimed in ~~any one of claims 1 to 9~~ claim 1 wherein the coupling between the antigen-presenting-cell (APC) targeting molecule and the immunomodulatory antigen is reversible.

11. (Currently amended) An immunomodulator as claimed in ~~any one of claims 1 to 10~~ claim 1 wherein the immunomodulatory antigen is a protein or a peptide.

12. (Currently amended) A pharmaceutical composition comprising an immunomodulator according to ~~any one of claims 1 to 11~~ claim 1 and one or more pharmaceutically acceptable carriers, adjuvants, excipients and/or solvents.

13. (Currently amended) A vaccine comprising an immunomodulator according to ~~according to any one of claims 1 to 11~~ claim 1.

14. (Currently amended) A method of therapeutic or prophylactic treatment of a disorder which requires the induction or stimulation of the immune system, comprising the administration to a subject requiring such treatment of an immunomodulator or of a pharmaceutical composition according to ~~any one of claims 1 to 13~~ claim 1.

15. (Currently amended) A method as claimed in claim 14 wherein the disorder is selected from the group consisting of bacterial, viral, fungal or parasitic infection, autoimmunity, allergy and/or pre-neoplastic transformation.

16. (Currently amended) Use of an immunomodulator according to ~~any one of claims 1 to 13~~ claim 1 in the preparation of a medicament for the therapeutic or prophylactic treatment of a disorder which requires the induction or stimulation of the immune system.

17. (Currently amended) A method of preparing an immunomodulator of ~~any one of claims 1 to 13~~ claim 1 comprising the steps of:

- a. introducing a modification and/or a deletion into the T-cell binding site of an antigen-presenting-cell (APC) targeting molecule which is structurally a SMEZ-2 superantigen, and
- b. coupling thereto an immunomodulatory antigen.

18. (Original) An immunomodulator prepared in accordance with a method of claim 17.

19. (Original) A superantigen having the SEQ ID NO:1 but for one or more mutations present at positions 18, 42, 75 and 182.

20. (Original) A superantigen as claimed in claim 19 wherein the mutations are chosen from the group consisting of:

Y18A;
W75L;
K182Q; and
D42C.

21. (Original) A superantigen SMEZ-2 having the amino acid sequence of SEQ ID NO:2.

22. (Original) A superantigen SMEZ-2 having the amino acid sequence of SEQ ID NO:3.

23. (Currently amended) A nucleic acid encoding any one of the superantigens of ~~claims 18 to 22~~ claim 18.

24. (Currently amended) A nucleic acid construct comprising at least a nucleic acid encoding any one of the superantigens of ~~claims 18 to 22~~ claim 18.

25. (New) A nucleic acid construct comprising at least a nucleic acid encoding any one of the superantigens of claim 19.

26. (New) A nucleic acid construct comprising at least a nucleic acid encoding any one of the superantigens of claim 20.

27. (New) A nucleic acid construct comprising at least a nucleic acid encoding any one of the superantigens of claim 21.

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28. (New) A nucleic acid construct comprising at least a nucleic acid encoding any one of the superantigens of claim 22.